

REMARKS

The Final Office Action mailed March 23, 2010 and the references cited therein have been carefully considered. Claim 1-16, 18 and 20 are now pending in the application. By this Response, Claims 1, 9, 14 and 16 are hereby amended and new claims 21 and 22 are added. The amendments to Claims 1 and 14, remove the language previously incorporated from now cancelled dependent Claims 17 and 19, respectively, and introduce language from claim 9 into both independent claims. Support for the recitation of “scattering,” that was added to Claims 1 and 14, can be found in the specification at page 13, lines 15-16. The amendment to Claim 9 deletes the language incorporated into the independent claims. The subject matter of cancelled claims 17 and 19 are hereby reintroduced into new dependent claims 21 and 22. Claim 8 was deleted and Claim 16 was amended to remove redundancy in the claims. Thus, no new matter has been added by amendments to the claims.

Claim Rejections under 35 USC §103

Claims 1-16, 18 and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over European Patent No. 1,398,174 to **Moreau** in view of U.S. Published Patent Application 2005/0040641 to **Cote** et al. Applicants traverse this rejection and respectfully request reconsideration and withdrawal of the pending rejections of the claims herein. Applicants’ prior responses to Office Actions described various aspects disclosed by both Moreau and Cote, and those arguments are hereby incorporated by reference.

The subject Office Action admits that Moreau does not disclose providing a lacquer layer (a sealing layer) via a printing, pouring, sprinkling or spraying. Thus, Cote is cited in the Office Action as disclosing a protective layer of lacquer, particularly polyethylene terephthalate (PET), that is applied as a printed coating. Applicant respectfully traverses the assertion that Cote discloses applying PET by printing, or any protective layer that has matching expansion characteristics to that of film element to which it is applied.

A known problem when creating thin layer security documents is that a film element applied to one side of a thin web substrate, such as paper, unavoidably causes the substrate to bend or warp. One factor that contributes to this effect is the different physical properties of paper versus the applied film element, in particular the different expansion characteristics (see, Applicant's original disclosure page 3, last paragraph). Accordingly, Applicants' invention provides a counterweight to this problem, in the form of a lacquer layer that is applied by printing, scattering, sprinkling or spraying. Also, the counterweight lacquer is notable because not just any lacquer is used, but rather one that has approximately the same expansion coefficients to that of the film element. However, it should be noted that not just any material that has similar expansion characteristics to a film element can be applied by printing, scattering, sprinkling or spraying. In fact, polyethylene terephthalate (PET), is precisely one of those materials that can not be applied by printing, scattering, sprinkling or spraying due to its intrinsic viscosity. Thus, while the Cote patent discloses the use of PET as a protective layer, it does not disclose applying it by printing.

The Examiner's attention is respectfully directed to Cote paragraph [0043] (cited in the Office Action) where two alternative protective layers are disclosed. One type of protective layer *"may take the form of a protective film having a thickness ranging from about 3 to about 12 microns (preferably from about 4 to about 8 microns)"* (emphasis added). The second type of protective layer may take the form of *"a printed coating having a thickness ranging from about 1 to about 12 microns"* (emphasis added). Thus, films and printed coatings are distinguished in terms of their possible layer thickness, and rightly so as it is understood in the art that they have very different properties. Also, in paragraph [0044] Cote discloses the preferred embodiment is a protective film and more preferably a laminated polyester film. Cote goes on to specify a preferred group of colorless polymers that can be used, including polyester, polypropylene, polyethylene terephthalate (also known as PET) and mixtures thereof. However, it must be understood that those disclosed colorless polymers could only reasonably be used for the protective film embodiment and not the printed coating embodiment. They are simply too viscous to be applied by printing. Also, while Cote suggests an alternative printed coating protective layer, that patent is silent as to what substance would be used for that embodiment.

In other words, it must be understood that the type of polymer resins disclosed by Cote have a very viscous rubbery nature that would prevent them from being applied as a printed coating, which is particularly true of PET. There is a very limited number of solvents which are used to solve PET, the most common being phenol or its derivatives, which are malodorous, toxic substances. Also, a very high level of heat is required to dissolve PET. During the evaporation of phenol, a partial ester interchange takes place, resulting in low-molecular phenol esters of the

phthalic acid. Accordingly, Cote does not disclose applying a thick PET printed coating, since PET and the other polymers disclosed by Cote are far too viscous and could only be used to form films or items of greater thickness by extrusion.

Thus, contrary to the suggestion in the subject Office Action, Cote does not disclose or reasonably suggest applying a lacquer layer by printing, scattering, sprinkling or spraying that has an expansion coefficient which approximately corresponds to the expansion coefficient of the film element. More notably, the combination of Moreau and Cote do not disclose or reasonably suggest providing a film element formed of PET with a sealing/lacquer that was applied by printing and also formed of PET, as suggested in the subject Office Action at paragraph 9. Therefore, the combination of Moreau and Cote fails to teach all the elements of the claimed invention. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. §103 of all the claims presented.

Conclusion

Applicants submit that the amended claims, particularly independent Claims 1 and 14, and Claims 2-7, 9-13, 15, 16, 18 and 20-22 which ultimately depend from Claims 1 and 14, are similarly patentable over the art of record by virtue of their dependence. Also, Applicants submit that Claims 1 and 14, and Claims 2-7, 9-13, 15, 16, 18 and 20-22 define patentable subject matter in their own right.

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In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and allowance of the claims presented. If the Examiner has any questions or suggestions to expedite allowance of this application, he is cordially invited to contact Applicants' attorney at the telephone number provided.

Respectfully submitted,

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